PRINCIPLES & GUIDELINES

3 February 1983

OBJECTIVES

- **Understand role of P&G in Corps planning process.**
- **Define NED Plan**
- **Identify steps in planning process.**

EVOLUTION OF NATIONAL PLANNING POLICY

- **1936-Flood Control Act**
- **1950-Green Book (Revised 1958)**
- **1962-Senate Document 97**
- **1965-Water Resources Planning Act**
- **1969-National Environmental Policy Act (NEPA)**

EVOLUTION OF NATIONAL PLANNING POLICY

- **1970 - Flood Control Act**
- **1973 - Principles and Standards**
- ***1983 -*** *PRINCIPLES AND GUIDELINES*
- **1986 - Water Resources Development Act**

PRINCIPLES

1. **Purpose and Objective**
2. **FEDERAL OBJECTIVE**
3. **State and local concerns**
4. **International Concerns**
5. **ALTERNATIVE PLANS**
6. **PLAN SELECTION**
7. **Accounts**

PRINCIPLES

8. **Discount Rate**
9. **Period of Analysis**
10. **Risk and Uncertainty**
11. **Cost Allocation**
12. **Planning Guidance**
13. **Effective Date**

PRINCIPLES: FEDERAL OBJECTIVE

Contribute to **National Economic Development** consistent with protecting the Nation's environment pursuant to national environmental statutes, applicable executive orders and other Federal planning requirements.

PRINCIPLES: ALTERNATIVE PLANS

- **Consider all reasonable alternatives**
- **Four Criteria:**
  - **Completeness**
  - **Effectiveness**
  - **Efficiency**
  - **Acceptability**
- **Mitigate for adverse impacts**

PRINCIPLES: PLAN SELECTION

	ANNUAL COSTS	ANNUAL BENEFITS	NET BENEFITS	BCR
PLAN A	1000	1500	500	1.5
PLAN B	3500	5000	1500	1.4
PLAN C	5000	6000	1000	1.4

PRINCIPLES: PLAN SELECTION

- **NED PLAN**
  - **Reasonably maximizes net benefits**
  - **Required to recommend**
  - **Is not the plan with highest BCR**
  - **Is not the plan with most benefits**

PRINCIPLES: PLAN SELECTION

- **EXCEPTIONS TO NED:**
  - **Locally Preferred Plan**
  - **National Ecosystem Restoration Plan (NER)**

GUIDELINES - STANDARDS

1. **Introduction**
2. **The Federal Objective**
3. **Summary of Planning Process**
4. **General Planning Considerations**
5. **Inventory and Forecast of Without Plan Conditions**
6. **Alternative Plans**

GUIDELINES - STANDARDS

7. **Accounts**
8. **Displays**
9. **Cost Allocation**
10. **Plan Selection**
11. **Risk and Uncertainty**

GUIDELINES - STANDARDS
The Federal Objective

- **NED Plan**
  - **NED Benefits = Increases in value of national output of goods and services expressed in monetary units.**

GUIDELINES - STANDARDS

Summary of Planning Process

Six steps for Planning:

1. **Specify problems and opportunities**
2. **Inventory, forecast and analysis**
3. **Formulate alternative plans**
4. **Evaluate effects of alternative plans**
5. **Compare alternative plans**
6. **Select recommended plan**

GUIDELINES - STANDARDS
General Planning Considerations

- Federal, State, Local, International
- General Public
- Review and Consultation (NEPA)
- Interdisciplinary Planning
- Forecasting - Future without plan

GUIDELINES - STANDARDS

General Planning Considerations

- **Price levels**
- **Discount Rate**
- **Period of Analysis**
- **Risk and Uncertainty**

GUIDELINES - STANDARDS

Inventory and Forecast of W/O Plan Conditions

- **Define existing conditions**
- **Forecast future without project problems and opportunities.**

GUIDELINES - STANDARDS
Alternative Plans

- **Structural and non-structural measures**
- **OK to consider plans of others**
- **Mitigation for adverse effects**
- **Staged construction**
- **Four criteria**

GUIDELINES - STANDARDS
Accounts

Four Accounts:

NED - National Economic Development

EQ - Environmental Quality

RED - Regional Economic Development

SWB - Social Well Being

GUIDELINES - STANDARDS
Cost Allocation

- Multi-purpose projects
- Allocate costs among purposes
- Use separable costs/remaining benefits method

GUIDELINES - STANDARDS
Plan Selection

- **NED PLAN**
  - **Reasonably maximizes net benefits**
  - **Required to recommend**
  - **Is not plan with highest BCR**
  - **Is not plan with most benefits**

- **Exceptions:**
  - **Locally Preferred Plan**
  - ***Ecosystem Restoration***

GUIDELINES - STANDARDS

Risk and Uncertainty

- **Uncertainty and variability**
- **Sources**
- **Characterize degrees of R&U**
- **Quantify as possible**
- **Do sensitivity analysis**

SUMMARY

- **P&G - basic framework for Corps water resources planning process.**
- **NED Plan - plan that reasonably maximizes net NED benefits.**
- **Planning process = six steps.**